Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DM3

Date: 07-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.54 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	**100**	100
26.5	**96.23**	90-100
19.0	**89.34**	71-95
13.20	**75.67**	56-80
4.75	**48.22**	38-54
2.36	**32.56**	28-42
0.300	**15.75**	7-21
0.075	**6.72**	2-8

KIRAN. R
M.E, (Civil-Engg)

AE

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DS3

Date: 08-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.

{*Project**: *Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.*
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	**1189**	900
2	Marshall Flow at 60°C, mm.	**3.19**	2.0 - 4.0

AE

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DM4 Date: 07-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.53 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	**100**	100
26.5	**94.45**	90-100
19.0	**88.98**	71-95
13.20	**75.56**	56-80
4.75	**48.67**	38-54
2.36	**32.58**	28-42
0.300	**15.47**	7-21
0.075	**6.93**	2-8

KIRAN. R
M.E. (Civil-Engg)

AE

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DS4

Date: 08-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	**1240**	900
2	Marshall Flow at 60°C, mm.	**3.52**	2.0 - 4.0

AE

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DM5

Date: 08-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.54 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	100	100
26.5	96.89	90-100
19.0	88.57	71-95
13.20	75.45	56-80
4.75	48.35	38-54
2.36	31.47	28-42
0.300	17.23	7-21
0.075	6.83	2-8

KIRAN. R
M.E. (Civil-Engg)

AE

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DS5

Date: 09-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	**1192**	900
2	Marshall Flow at 60°C, mm.	**3.09**	2.0 - 4.0

AE

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-CD2

Date: 07-05-2018

1. TEST REPORT ON COARSE AGGREGATE:

Sub: Testing of Coarse Aggregate used in Dense Graded Bituminous Macadam.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TABLE 1.1 ;

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)–1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	**26.17%**	Not more than 27.00 % for DBM
2.	Combined Flakiness and Elongation index, %	**25.28 %**	Not more than 35.0 %
3.	Water absorption, %	**0.49 %**	Not more than 2.0 %
4.	Specific gravity	**2.61**	------
5.	Soundness	**6.28 %**	Max. 12 % in Sodium Sulphate

KIRAN. R
M.E, (Civil-Engg)

AE

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DM6

Date: 08-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.54 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	**100**	100
26.5	**97.89**	90-100
19.0	**88.19**	71-95
13.20	**76.23**	56-80
4.75	**48.45**	38-54
2.36	**32.76**	28-42
0.300	**15.11**	7-21
0.075	**7.34**	2-8

KIRAN. R
M.E, (Civil-Engg)

AE

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DS6

Date: 09-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.

{Project*: *Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.*
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	**1212**	900
2	Marshall Flow at 60°C, mm.	**3.67**	2.0 - 4.0

AE

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DM7

Date: 09-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.51 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	100	100
26.5	98.23	90-100
19.0	88.98	71-95
13.20	72.56	56-80
4.75	49.45	38-54
2.36	38.23	28-42
0.300	18.65	7-21
0.075	7.25	2-8

KIRAN. R
M.E, (Civil-Engg)

AE

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DS7

Date: 10-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	**1256**	900
2	Marshall Flow at 60°C, mm.	**3.76**	2.0 - 4.0

AE

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DM8

Date: 09-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.56 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	100	100
26.5	96.88	90-100
19.0	89.34	71-95
13.20	76.76	56-80
4.75	49.34	38-54
2.36	32.65	28-42
0.300	17.65	7-21
0.075	7.23	2-8

K.R
KIRAN. R
M.E, (Civil-Engg)

AE

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Banglore

NZ/QC/YPD/T&F-W3/2018-19/P1-DS8

Date: 10-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	**1162**	900
2	Marshall Flow at 60°C, mm.	**3.89**	2.0 - 4.0

AE

KIRAN. R
M.E, (Civil-Engg)

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DM9

Date: 10-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}

Ref.: Material testing/PMC/17-18,

Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.51 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	100	100
26.5	96.77	90-100
19.0	88.42	71-95
13.20	76.05	56-80
4.75	50.26	38-54
2.36	35.78	28-42
0.300	17.11	7-21
0.075	7.12	2-8

KIRAN. R
M.E, (Civil-Engg)

AE

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Newzen Consultants Bangalore

NZ/QC/YPD/T&F-W3/2018-19/P1-DS9

Date: 11-05-2018

1.TEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.
{Project*: Pkg 1, 1.Improvement of drains and resurfacing to roads in SFS 208 area in ward no.03, Attur.
2.Improvement of drains and resurfacing to roads in SFS 407 area in ward no.03, Attur.
3.Improvement of drains and resurfacing to roads in SFS 707 area in ward no.03, Attur.
4.Improvement of drains and resurfacing to roads in Industrial area in ward no.03, Attur.
5.Improvement of Roads and drains in CHS 707 area in ward no.03, Attur.}
Ref.: Material testing/PMC/17-18,
Report Required for: Assistant Executive Engineer,
Yelahanka Project Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri. BB Umesha (M/s SMLP Constructions & Asphalt).

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	**1160**	900
2	Marshall Flow at 60°C, mm.	**3.40**	2.0 - 4.0

AE

KIRAN. R
M.E, (Civil-Engg)

For Newzen Consultants Bangalore

Proprietor

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA,
JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com